

caudal, 16 or 17 between anal and caudal. Breast and belly shielded; pectoral scutes numerous, polygonal; ventrals, 9 or 10 transversely enlarged ones on each side and 3 or 4 series of smaller ones in the middle. All the scutes spinulose, but not striated. Male with a thick band of long hair-like bristles on each side of the head from the mouth to the gill-cleft, and another on the occiput and nape, also on the upper surface of the four outer rays of the pectoral fin. Brownish above, with five more or less distinct darker cross-bands, the first at the base of the dorsal fin; fins spotted with blackish.

Total length 210 millim.

Several specimens from St. Javier (60 feet) and the Rio Durango (350 feet).

Allied to *L. lanceolata*, Gthr.

XVI.—*Preliminary Report on a Collection of Medusæ from the Coast of British Columbia and Alaska.* By LOUIS MURBACH and CRESSWELL SHEARER.

THE material forming the basis of this report was obtained by the junior author during a trip to the coast of British Columbia in the summer of 1900 in company with Professor MacBride, of McGill University. Since then additions have been received from Professor Kincaid, Seattle, Washington. These additions have enlarged and extended the range of the collection, besides facilitating comparison with forms already at hand.

The list of species is as follows:—

*Codonium apiculum*, sp. n.  
*Turris brevis*, sp. n.  
*Gonionemus Agassizii*, sp. n.  
*Polyorchis minuta*, sp. n.  
*Mesonema victoria*, sp. n.  
*Gonionemus vertens*.  
*Syndictyon angulatum*.  
*Dipurena dolichogaster*.  
*Hippocrene Mertensii*.

*Thaumantias cellularia*.  
*Proboscidaetyla brevicirrata*.  
*Phialidium languidum*.  
 — *gregarium*.

SIPHONOPHORA.

*Muggiæa Kochii*.

In addition to the above are the following, whose identity, through imperfect preservation, is somewhat doubtful:—

*Sarsia eximia*.  
 — *rosaria*.

*Atollia Bairdii*.  
*Obelia polystyla*.

## DESCRIPTION OF NEW SPECIES.

*Mesonema victoria*, sp. n.

Bell hemispherical, twice as broad as high. Velum well developed. Tentacles over one hundred in number, shorter than the diameter of the bell. Small papillæ between the tentacles and below them; excretory papillæ beneath the velum. Ootocysts present. Gastric cone lens-shaped, not pedunculated. Mouth much lobed, half as many lobes as there are radial canals. Radial canals about one hundred, running to the highest point of the stomach. Each radial canal is covered on its outer edge by a ridge of glandular cells; sometimes these are continued over the stomach and oral peduncle down to the lobes of the mouth, resembling the appearance presented by the ovaries of *Orchistoma*.

Colour: bell transparent, organs opaque.

Collected in considerable numbers at the entrance of Victoria Harbour, and in Puget Sound.

*Codonium apiculum*, sp. n.

Bell nearly one half taller than broad. The apical process on the bell is small and not abruptly set off from its surface. Apical canal short. Velum well developed. The four tentacles are strong and can be protruded to great length when the animal is floating on the surface of the water. They are attached by strong tentacle-bulbs to the bell-margin. Each tentacle-bulb has two nematocyst-pads, one on either side. The stomach passes without distinction into the proboscis, which is cylindrical and thrown into circular ridges bearing the gonads.

Colour: bell-margin and radial canals pale blue; stomach and proboscis purple.

Found in Puget Sound, and in great numbers in Victoria Harbour.

*Polyorchis minuta*, sp. n.

Bell 15 millim. high, 12 millim. broad, truncated-oval in shape. A prominent cone-shaped gelatinous peduncle depends from the roof of the bell, and to this the stomach and the upper ends of the radial canals and the gonads seem to be attached. The lower truncated edge of the bell is nearly as broad as the velum, which is strong and 2.5 millim. in breadth. There are sixty-four tentacles with long slender tentacle-bulbs. The lateral diverticula on the radial canals

are short and only in a few cases opposite one another; they are not club-shaped: there are about thirty-two on each side of the radial canals. The four groups of filamentous gonads hang from the proximal ends of the radial canals, reaching to the level of the velum. There are eight gonads in each group, the central one being the longest.

Found in Puget Sound.

This species differs from Agassiz's *P. penicillata* in the lack of lateral diverticula on the ends of the radial canals next the circular canal, the larger number of tentacles, and the length of the gonads.

*Turris brevicornis*, sp. n.

The bell is 4.5 centim. high, 3.5 centim. broad, the general shape of the bell being somewhat cubical. The velum is well developed and strong. On the greater part of the bell-margin there appear to be two rows of tentacles, arranged zigzag. There are about one hundred and forty coiled tentacles, whose proximal ends spread out rider-shaped, clasping the margin of the bell instead of being fastened to it by means of tentacle-bulbs. Hæckel has described a similar arrangement in the tentacles of *Tiara pileata*. The walls of the stomach are much folded and evaginated into interradial pouches, looking like opposite diverticula of the upper part of the radial canals or stomach. There are five pairs of these diverticula bearing the gonads suspended from double mesenteries. The proboscis is not well developed. The four large mouth-lobes are scalloped and finely fringed, perradial in position. The gonads and the stomach occupy less than the upper half of the bell-cavity. The radial canals are lancet- or spindle-shaped in outline, bearing unbranched but well-marked lateral diverticula throughout their whole length. Bell probably bluish or violet; stomach, tentacles, and gonads dark red or purplish.

Found at St. Paul Island (Pribiloff Islands), Alaska.

*Gonionemus Agassizii*, sp. n.

This species differs from the others so far known by the smaller size and the greater number of tentacles, and the larger gastric cone. The bell is hemispherical. The four radial canals bear the frilled gonads on the under surface. The tentacles are provided with the characteristic adhesive pad near their ends.

Found in a salt lake on Unalaska (Aleutian Islands).